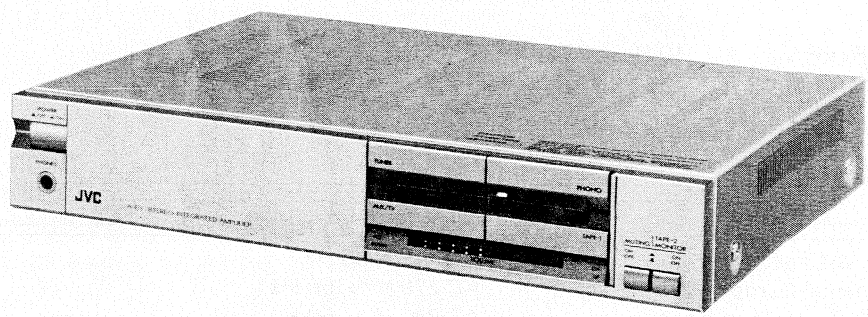
JVC

SERVICE MANUAL

MODEL A-E3

STEREO INTEGRATED AMPLIFIER



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Warning:
When replacing the parts marked with ⚠ , be sure to use the designated parts to ensure safety.

1. Specifications

Output Power : 25 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.08 % total harmonic distortion
30 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.7 % total harmonic distortion
27 watts per channel, min. RMS, both channel driven, into 8 ohms at 1 kHz with no more than 0.03 % total harmonic distortion

Total Harmonic Distortion : 0.08 % at Rated output, from 20 Hz to 20 kHz, 8 ohms
0.7 % at Rated output at 1 kHz, 8 ohms

Intermodulation Distortion : 0.08 % at Rated output, 8 ohms

Power Band Width : 10 Hz – 30 kHz (IHF, both channels driven, 8 ohms, 0.08 % THD)

Frequency Response : 10 Hz – 30 kHz $^{+1.0\ dB}_{-3\ dB}$

Damping Factor : 30 (1 kHz, 8 ohms)

Tone Controls
- BASS : 100 Hz ± 8 dB
- TREBLE : 10 kHz ± 8 dB

Input Sensitivity/ Impedance
- Phono : 2.5 mV/47 kohms
- TUNER, AUX, TAPE : 150 mV/40 kohms

Rec. Output Level : 150 mV

Phono Equalizer Deviation : ± 1.0 dB (40 Hz – 15 kHz)

Signal to Noise Ratio
- Phono : 67 dB (new IHF) 70 dB (IHF)
- TUNER, AUX, TAPE : 75 dB (new IHF) 90 dB (IHF)

Loudness Control (Volume Control at -30 dB position) : +6 dB at 100 Hz, +3 dB at 10 kHz

Dimensions : 2-1/2"(H) x 13-1/2"(W) x 10-1/2"(D) (59 mm x 340 mm x 267 mm)

Weight (net) : 7.71 lbs. (3.5 kg)

Power Specifications

Area	Line Voltage & Frequency	Power Consumption
U.S.A. & Canada	AC120 V, 60 Hz	110 W, 135 VA
Continental Europe	AC 220 V ∿, 50 Hz	150 W
U.K. & Australia	AC 240 V ∿, 50 Hz	150 W
Other Countries	AC 110/120/220/240 V ∿ selectable, 50/60 Hz	195 W

Design and specifications subject to change without notice.

2. Service Precautions

When replacing or repairing parts:

1. Since the pushbuttons of the operation switches are fixed in the front panel and the switch units, they can not be removed unless they are released from the panel and units. Therefore, before replacing, remove the front panel.
2. Before repairing, be sure to discharge the large electrolytic capacitors across a resistor of about 100 Ω/1 W.
3. Normal check of P.C. boards is possible by only removing the chassis base in the bottom.
   For removal of parts and P.C. boards, refer to **"5. Removal Procedures"** and **"6. Exploded View and Part Numbers"**.

3. Names of Parts and Their Functions

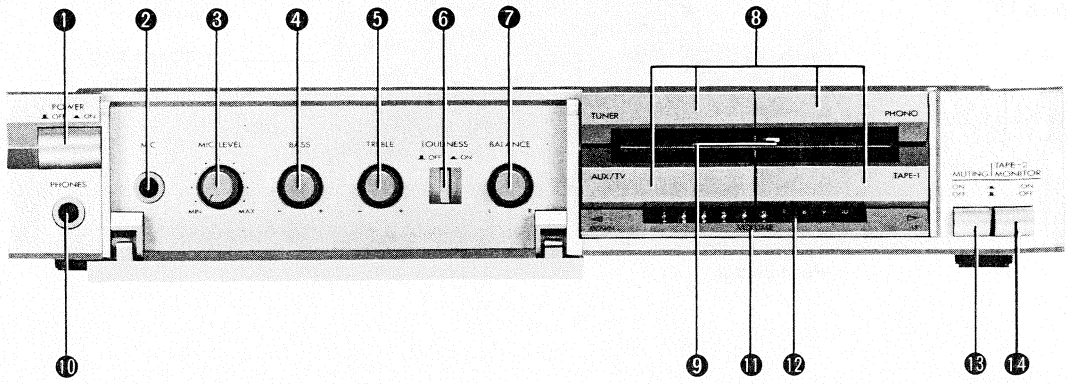

Fig. 1

Attention
Each pushbutton switch has two positions to which it can be set: the "in" position and the "out" position.
▬ : Indication for the "in" (engaged) position. The switch can be set to this position by simply pressing it.
▬ : Indication for the "out" (released) position. If the switch is already in the "in" position, simply pressing it again will set it to the "out" position.

❶ **POWER switch**
Press once to turn the power on (▬). The unit will operate after 5 seconds. Press again to switch off (▬).

❷ **MIC jack**
Plug in a microphone with an impedance of 600 to 10,000 ohms.
Note: Decrease the MIC LEVEL control by turning it counterclockwise when plugging a microphone into the jack or removing it.

❸ **MIC LEVEL control**
Turn clockwise to boost the microphone input level, counterclockwise to decrease it.

❹ **BASS control**
Turn clockwise to boost bass response, counterclockwise to decrease bass response.

❺ **TREBLE control**
Turn clockwise to boost treble response, counterclockwise to decrease treble response.

❻ **LOUDNESS switch**
At low volumes the tone of sound appears to change. This is not due to any change in the sound itself, but to the ear's different sensitivity to sound at low volumes. Press this switch in (▬) to compensate for this when listening at low volumes. When the switch is pressed (▬), the indicator lights. Press it again to disengage (▬); the indicator goes off.

❼ **BALANCE control**
Adjust to balance the volume of left and right speakers. Usually set it to its center click position.

❽ **SOURCE SELECTORS**
TAPE-1: Press to listen to the tape deck connected to the TAPE-1 terminals.
TUNER: Press to listen to broadcasts received by the tuner connected to the TUNER terminals.
PHONO: Press to listen to records.
AUX/TV: Press to listen to sources connected to the AUX terminals.

❾ **Source indicators**
These are illuminated corresponding to the source selected.

❿ **PHONES jack**
Plug stereo headphones into this jack for private listening.

⓫ **VOLUME control**
UP : Press to increase the speaker or headphones volume.
DOWN : Press to decrease the speaker or headphones volume.

⓬ **LEVEL indicator**
Ten LEDs glow light-red from left to right or right to left according to the setting of the VOLUME control. If the MUTING switch is pressed, the left one will flicker.

⓭ **MUTING switch**
Press in (▬) to mute the sound instantaneously by -20 dB; the MUTING indicator will light. Use this switch when answering the telephone, for example. Pressing once again (▬) returns the volume level to that set with the VOLUME control.

⓮ **TAPE-2 MONITOR switch**
Press to listen to or monitor a tape deck connected to the TAPE-2 terminals (▬). Press it again (▬) to disengage.
Note: This switch cannot be used to listen to sources other than TAPE-2. Monitoring other sources is impossible.

4. Main Parts Location

4-(1) Top View

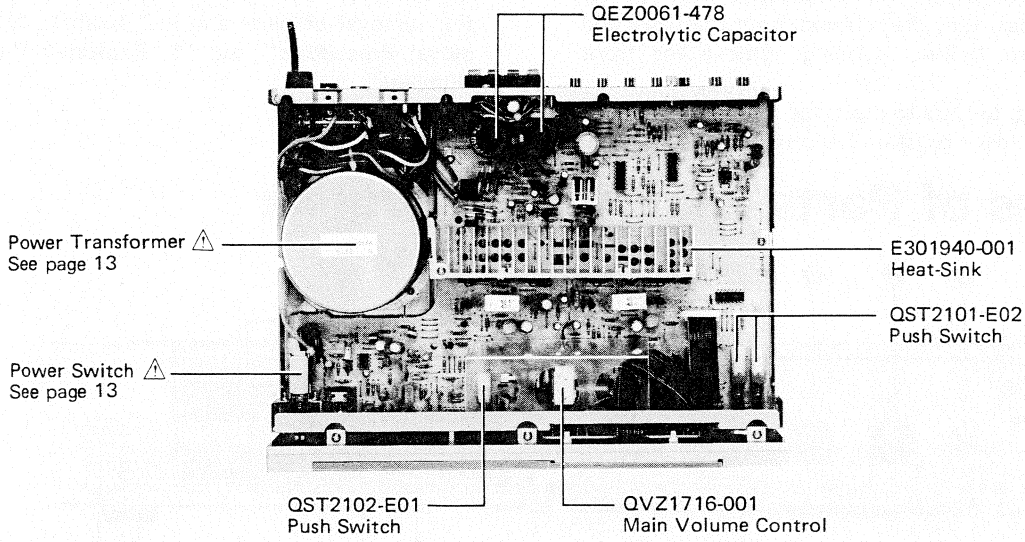

Fig. 2

4-(2) Front View

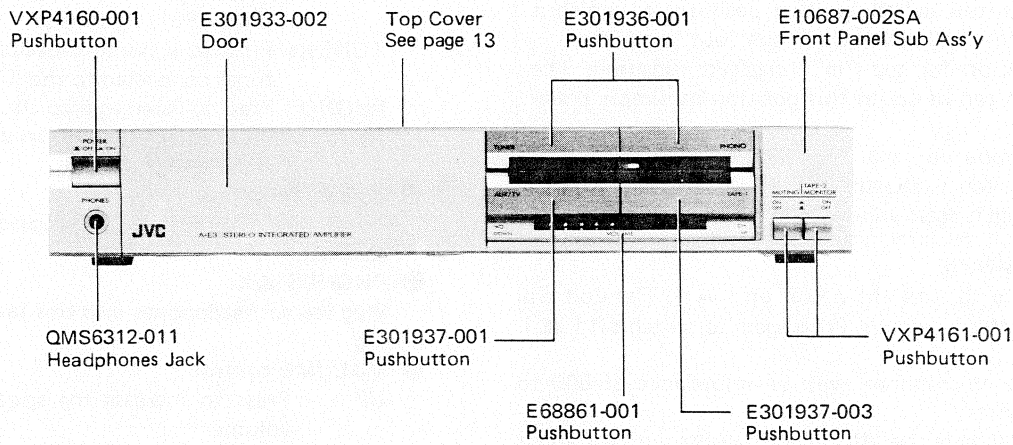

Fig. 3

4-(3) Rear View

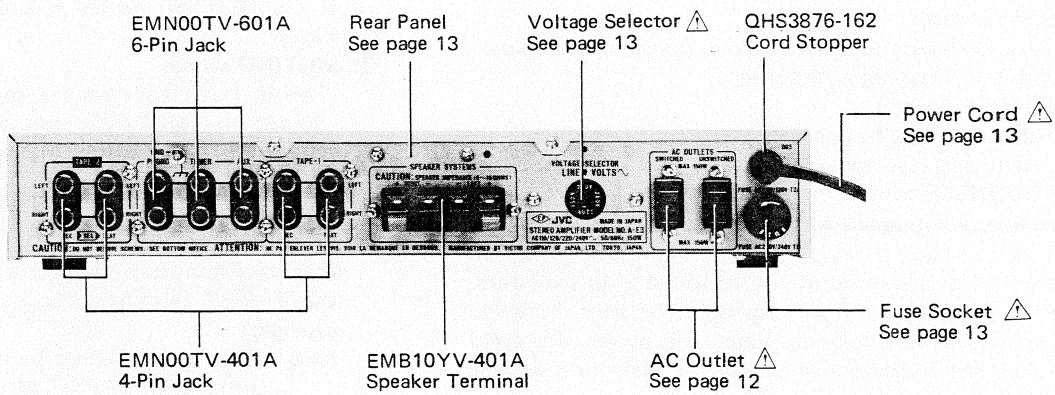

Fig. 4

⚠ : Safety Parts

5. Removal Procedures (See Fig. 7)

5-(1) Removal of Top Cover

1. Remove four screws ❶ and two tapping screws ❷ .
2. Remove the top cover as taking it out rearwards.

5-(2) Removal of Front Panel

1. Remove the top cover. (See above)
2. Remove three tapping screws ❸ in the upper side and three tapping screws ❹ in the lower side.
3. Release the LED board from its mounting catches.

5-(3) Check and Removal of P.C. Boards

When replacing a part or checking a board normally, it is unnecessary to remove the board. After removing the top cover, remove eight tapping screws ❺ and ❻ mounting the chassis base in the bottom and then two tapping screws ❼ mounting the board, and the pattern will appear. (See below)

Notes:

As the power transformer is attached to the chassis base, so remove the power transformer as required.

5-(4) Removal of Rear Panel

1. Remove the top cover. (See 5-(1))
2. Remove eight tapping screws ❽ mounting the pin jacks and speaker terminals.
3. Remove two tapping screws ❾ mounting the bracket.
4. Remove three tapping screws ❻ in the rear side among the chassis base mounting screws.

Notes:

1. When servicing, if possible, do not remove the wires and similar others.
2. When removing the board, reinstall it so that square ❿ at the right end in its front is inserted in the cut-out section of the front bracket.

5-(5) Removal of Power Transistors

1. Remove the chassis base. (See 5-(3))
2. Remove two tapping screws mounting the heat sink from bottom side of the board.
3. Release four power transistors Q719-722 from soldered joint, then separate the board and the heat-sink.

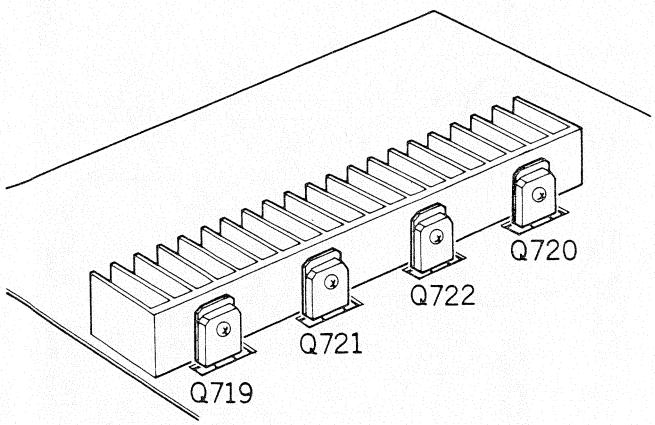

Fig. 5

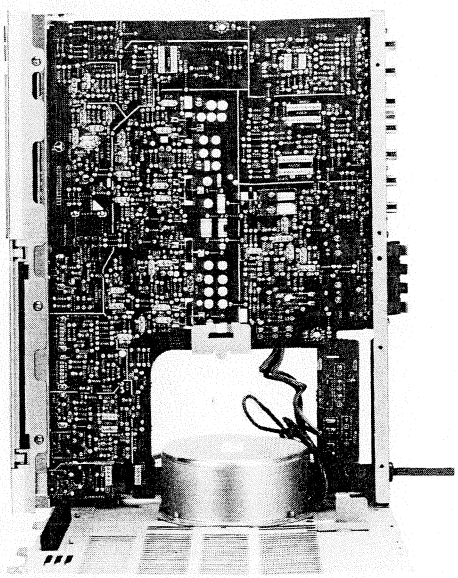

Fig. 6

6. Exploded View and Part Numbers

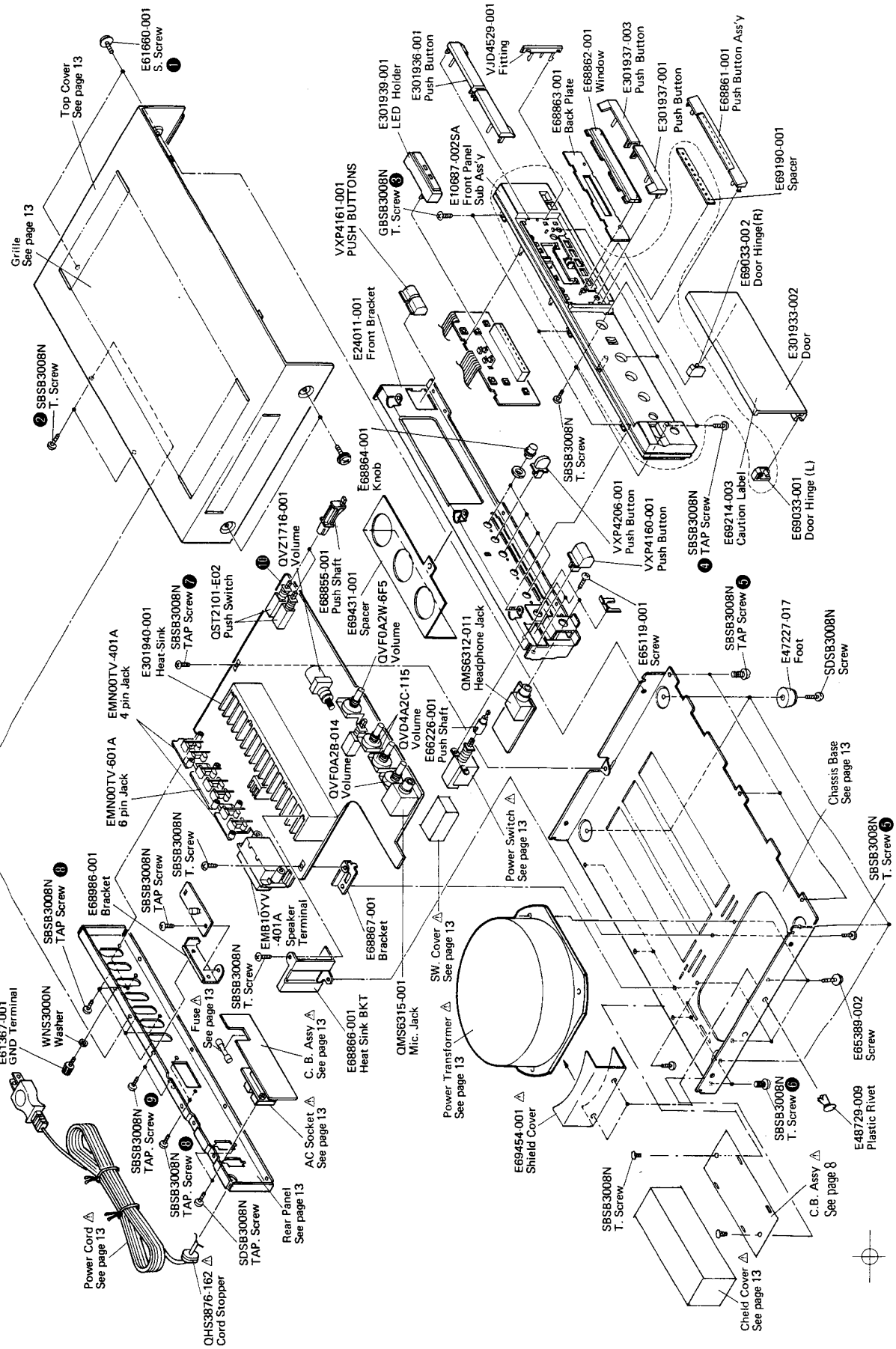

Fig. 7

7. Block Diagram

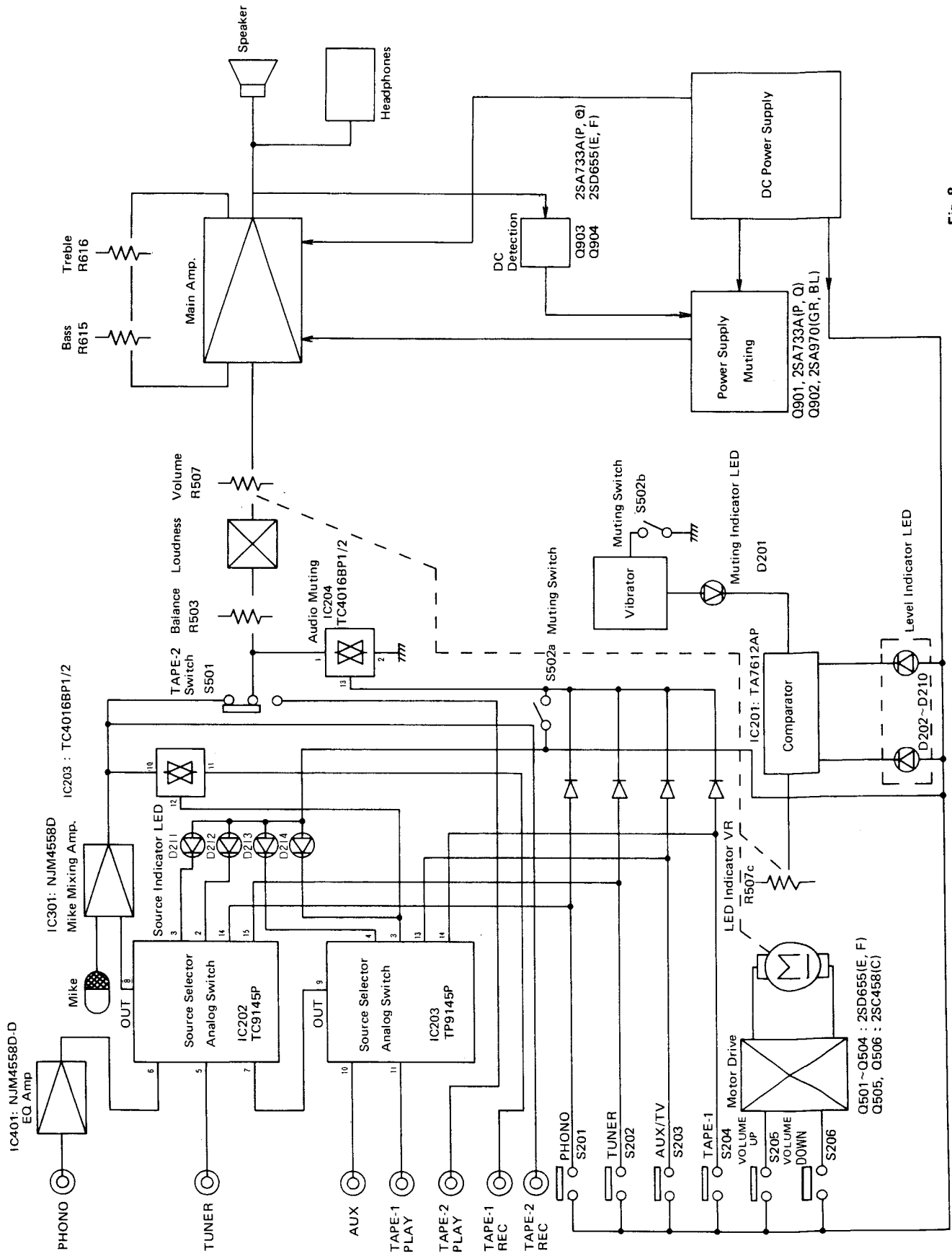

Fig. 8

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8. Adjustment Procedures

Adjustment Parts Location

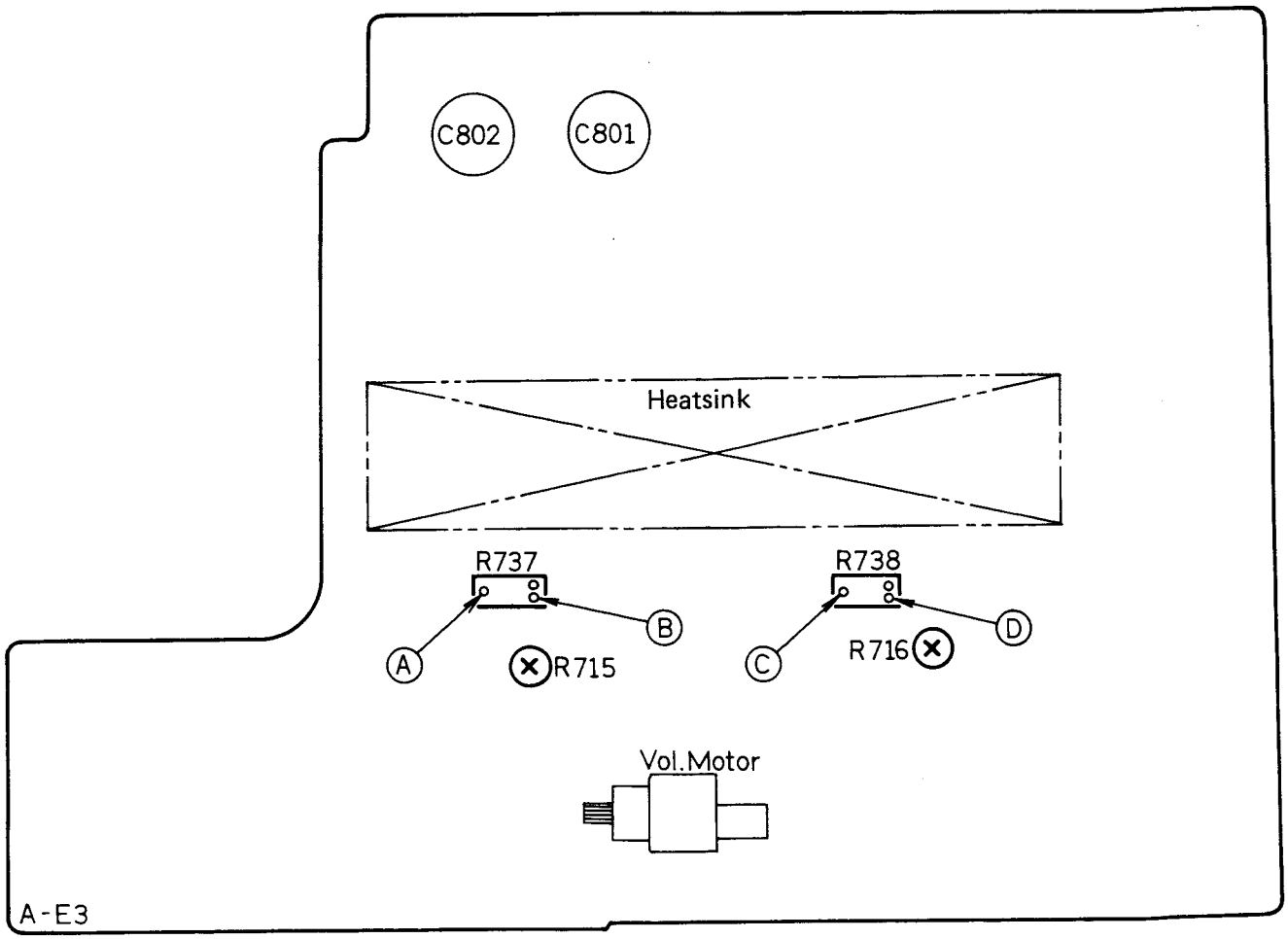


Fig. 9

8-(1) Power Amplifier Idling Current Adjustment

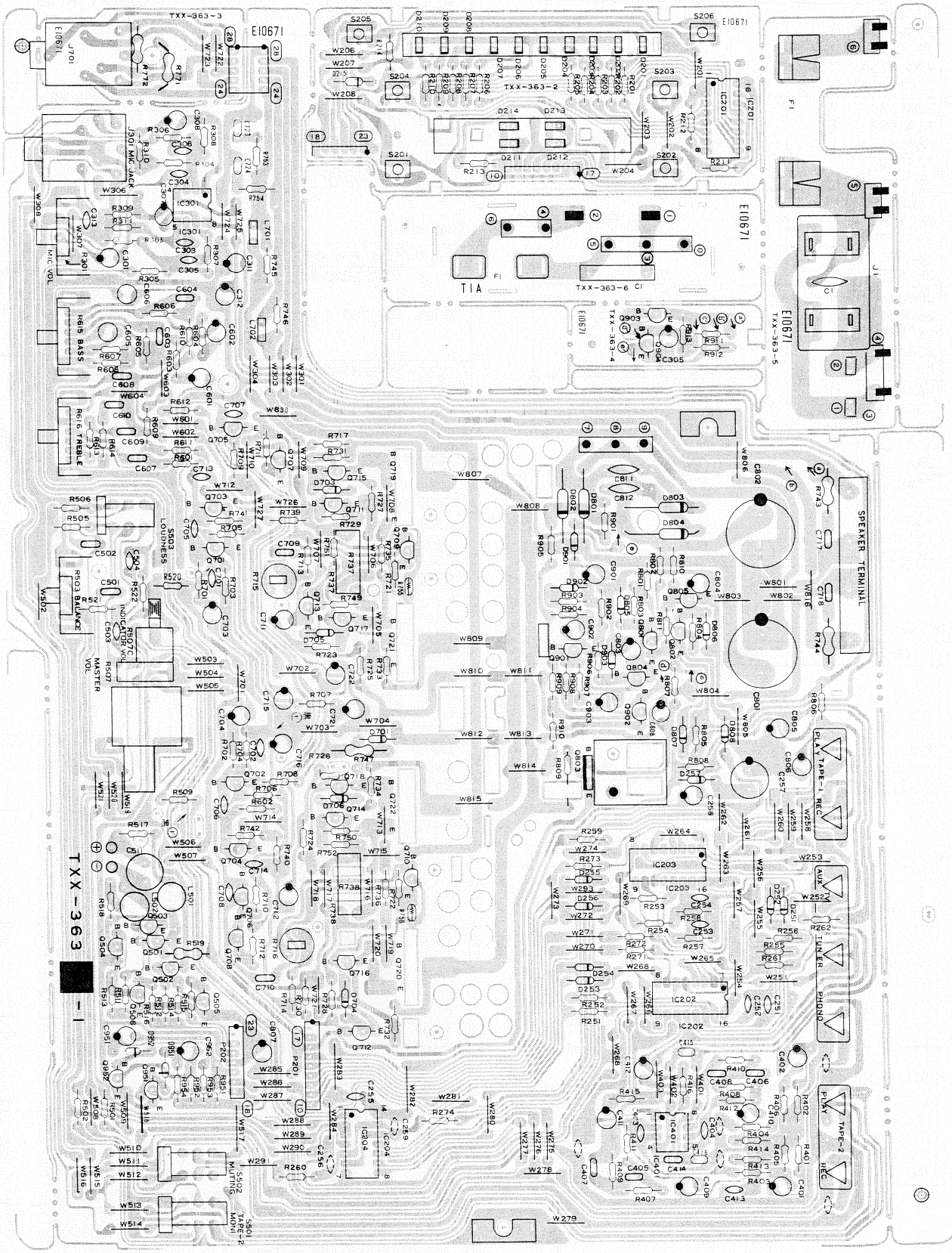
1. Before power ON, turn semi-fixed VRs R715 (Lch) and R716 (Rch) on the main board fully to the left.
2. After power ON (about 10 sec. later), adjust to 2.5 mV the voltages between test points Ⓐ and Ⓑ (Lch) and between test points Ⓒ and Ⓓ (Rch) on the main board, by turning R715 and R716 fully to the right.

Note: When measuring the voltages, be sure to disconnect the probe and enclosure (metallic case) of the measuring instrument from the grounds with the amplifier (A-E3) and the other measuring instruments. If not, the amplifier may be damaged.

9. Printed Circuit Board Ass'y and Parts List

9-(1) TXX-363 Main Amp. & Other Function Split P.C. Board Ass'y

Note: TXX-363B : for U.S.A. and Canada
TXX-363C : for U.S. Military Market and Other Countries
TXX-363D : for Europe (except W. Germany) and Australia
TXX-363E : for West Germany
TXX-363FBS : for U.K.



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Transistors

Item No.	Part Number	Rating	Description	Maker
Q501	2SD655 (E, F)		Silicon	Hitachi
Q502	2SD655 (E, F)		"	"
Q503	2SD655 (E, F)		"	"
Q504	2SD655 (E, F)		"	"
Q505	2SC458 (C)		"	"
Q506	2SC458 (C)		"	"
Q701	2SC1775AV (F1)		"	"
Q702	2SC1775AV (F1)		"	"
Q703	2SC1775AV (F1)		"	"
Q704	2SC1775AV (F1)		"	"
Q705	2SA1084 (D, E)		"	"
Q706	2SA1084 (D, E)		"	"
Q707	2SA949 (Y)		"	Toshiba
Q708	2SA949 (Y)		"	"
Q709	2SC2546 (E, F)		"	Hitachi
Q710	2SC2546 (E, F)		"	"
Q715	2SC2235 (Y)		"	Toshiba
Q716	2SC2235 (Y)		"	"
Q717	2SA965 (Y)		"	"
Q718	2SA965 (Y)		"	"
Q719	2SD716 (R, O)		"	"
Q720	2SD716 (R, O)		"	"
Q721	2SB686 (R, O)		"	"
Q722	2SB686 (R, O)		"	"
Q801	2SC2235 (O, Y)		"	Toshiba
Q802	2SA965 (O, Y)		"	"
Q803	2SD313V (D, E)		"	Sanyo
Q804	2SA733A (P, Q)		"	NEC
Q805	2SA733A (P, Q)		"	"
Q901	2SA733A (P, Q)		"	"
Q902	2SA970 (GR, BL)		"	Toshiba
Q903	2SA733A (P, Q)		"	NEC
Q904	2SD655 (E, F)		"	Hitachi
Q951	2SC458 (C)		"	"
Q952	2SC458 (C)		"	"

Integrated Circuits

Item No.	Part Number	Rating	Description	Maker
IC201	TA7612AP		I.C.	Toshiba
IC202	TC9145P		"	"
IC203	TC9145P		"	"
IC204	TC4016BP		"	"
IC301	NJM4558D		"	JRC
IC401	NJM4558D-D		"	"

Diodes

Item No.	Part Number	Rating	Description	Maker
D201	LN10204P		L.E.D.	Matsushita
D211	GL-9NG230		"	Sharp
D212	GL-9NG230		"	"
D213	GL-9NG230		"	"
D214	GL-9NG230		"	"
D215	RD5.6EB3		Zener	NEC
D251	1S2076-31		Silicon	Hitachi
D252	1S2076-31		"	"
D257	1S2076-31		"	"
D701	RD6.8EB3		Zener	NEC
D801	S3V20F		Silicon	Shindengen
D802	S3V20F		"	"
D803	S3V20F		"	"
D804	S3V20F		"	"
D805	RD12EB3		Zener	NEC

Diodes

Item No.	Part Number	Rating	Description	Maker
D806	RD12EB3		Zener	NEC
D807	RD2.7EB2		"	"
D901	1S2076-31		Silicon	Hitachi
D902	1S2076-31		"	"
D903	RD13EB3		Zener	NEC
D951	1S2076-31		Silicon	Hitachi
D952	1S2076-31		"	"

Coils

Item No.	Part Number	Rating	Description
L501	EQL2002-200K		Inductor
L502	EQL2002-200K		"
L701	Y00087-002		"
L702	Y00087-002		"

Capacitors

Item No.	Part Number	Rating		Description
C001	QFZ9010-472	4700 pF	250 V	Metalized Mylar (Europe and U.K.)
C001	QFZ9014-103	0.01 μF	125 V	Metalized Mylar (U.S.A. and Canada)
C255	QCF31HP-103Z	"	50 V	Ceramic
C257	QET51AM-228	2200 μF	10 V	Electrolytic
C258	QET61AM-476ZM	47 μF	"	"
C301	QET61HM-474ZM	0.47 μF	50 V	"
C303	QCS31HJ-101Z	100 pF	"	Ceramic
C304	QCS31HJ-101Z	"	"	"
C305	QCS31HJ-270Z	27 pF	"	"
C306	QCS31HJ-270Z	"	"	"
C307	QET61HM-225ZM	2.2 μF	"	Electrolytic
C308	QET61HM-225ZM	"	"	"
C311	QET61CM-107ZM	100 μF	16 V	"
C312	QET51CM-107M	"	"	"
C313	QCF31HP-223Z	0.022 μF	50 V	Ceramic
C401	QET61HM-105ZM	1 μF	"	Electrolytic
C402	QET61HM-105ZM	"	"	"
C403	QCS31HJ-101Z	100 pF	"	Ceramic
C404	QCS31HJ-101Z	"	"	"
C405	QFM31HK-182Z	1800 pF	"	Mylar
C406	QFM31HK-182Z	"	"	"
C407	QFM31HK-682Z	6800 pF	"	"
C408	QFM31HK-682Z	"	"	"
C409	QET61AR-107ZM	100 μF	10 V	Electrolytic
C410	QET61AR-107ZM	"	"	"
C411	QET61HM-474ZM	0.47 μF	50 V	"
C412	QET61HM-474ZM	"	"	"
C413	QCF31HP-473Z	0.047 μF	"	Ceramic
C414	QFM31HK-472Z	0.0047 μF	"	Mylar
C415	QFM31HK-472Z	"	"	"
C416	QFM31HK-473Z	0.047 μF	"	"
C501	QFM31HK-273Z	0.027 μF	"	"
C502	QFM31HK-273Z	"	"	"
C503	QCS31HJ-271Z	270 pF	"	Ceramic
C504	QCS31HJ-271Z	"	"	"
C511	QEZ0046-106	10 μF	50 V	Electrolytic
C601	QET61HM-475ZM	4.7 μF	"	"
C602	QET61HM-475ZM	"	"	"
C603	QFM31HK-333Z	0.033 μF	"	Mylar
C604	QFM31HK-333Z	"	"	"
C605	QFM81HK-224	0.22 μF	"	"
C606	QFM81HK-224	"	"	"
C607	QFM31HK-222Z	2200 pF	"	"
C608	QFM31HK-222Z	"	"	"
C609	QFM31HK-223Z	0.022 μF	"	"
C610	QFM31HK-223Z	"	"	"
C701	QCS31HJ-121Z	120 p	"	Ceramic
C702	QCS31HJ-121Z	"	"	"
C703	QET61HM-105ZM	1 μF	"	Electrolytic
C704	QET61HM-105ZM	"	"	"

Capacitors

Item No.	Part Number	Rating		Description
C705	QCS31HJ-101Z	100 pF	50 V	Ceramic
C706	QCS31HJ-101Z	"	"	"
C707	QCS31HJ-270Z	27 pF	"	"
C708	QCS31HJ-270Z	"	"	"
C709	QFM31HK-102Z	1000 pF	"	Mylar
C710	QFM31HK-102Z	"	"	"
C711	QET61HM-226ZM	22 μF	"	Electrolytic
C712	QET61HM-226ZM	"	"	"
C713	QCS31HJ-150Z	15 pF	"	Ceramic
C714	QCS31HJ-150Z	"	"	"
C715	QET61AM-476ZM	47 μF	10 V	Electrolytic
C716	QET51AM-476M	"	"	"
C717	QFM31HK-473Z	0.047 μF	50 V	Mylar
C718	QFM31HK-473Z	"	"	"
C721	QEH51CM-226	22 μF	16 V	Electrolytic
C722	QET61HM-476ZM	47 μF	50 V	Electrolytic
C723	QFM31HK-102Z	1000 pF	"	Mylar
C724	QFM31HK-102Z	"	"	"
C801	QEZ0061-478	4700 μF	"	Electrolytic
C802	QEZ0061-478	"	"	"
C803	QEH51CM-226	22 μF	16 V	"
C804	QET61CM-226ZM	"	"	"
C805	QET61CM-476ZM	47 μF	"	"
C806	QET61CM-476ZM	"	"	"
C807	QET61CM-476ZM	"	"	"
C808	QET61EM-106ZM	10 μF	25 V	"
C811	QCE22HP-103A	0.01 μF	500 V	Ceramic (U.S.A. and Canada
C811	QFZ0075-104H	0.1 μF	400 V	Metalized Mylar
C812	QCE22HP-103A	0.01 μF	500 V	Ceramic (U.S.A. and Canada)
C812	QFZ0075-104H	0.1 μF	400 V	Metalized Mylar
C901	QEH51HM-475	4.7 μF	50 V	Electrolytic
C902	QEH51HM-226	22 μF	"	"
C903	QEH51HM-476	47 μF	"	"
C905	QET61AM-227ZM	220 μF	10 V	"
C951	QET61EM-106ZM	10 μF	25 V	"
C952	QET61EM-106ZM	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R201	QRD141J-152S	1.5 kΩ	1/4 W	Carbon
R202	QRD141J-152S	"	"	"
R203	QRD141J-152S	"	"	"
R204	QRD141J-152S	"	"	"
R205	QRD141J-152S	"	"	"
R206	QRD141J-152S	"	"	"
R207	QRD141J-152S	"	"	"
R208	QRD141J-152S	"	"	"
R209	QRD141J-152S	"	"	"
R210	QRD141J-152S	"	"	"
R211	QRD141J-103S	10 kΩ	"	"
R212	QRD141J-103S	"	"	"
R213	QRD141J-122S	1.2 kΩ	"	"
R214	QRD141J-471S	470 Ω	"	"
R251	QRD141J-222S	2.2 kΩ	"	"
R252	QRD141J-222S	"	"	"
R253	QRD141J-222S	"	"	"
R254	QRD141J-222S	"	"	"
R255	QRD141J-104S	100 kΩ	"	"
R256	QRD141J-104S	"	"	"
R257	QRD141J-104S	"	"	"
R258	QRD141J-104S	"	"	"
R259	QRD141J-103S	10 kΩ	"	"
R260	QRD141J-222S	2.2 kΩ	"	"
R261	QRD141J-104S	100 kΩ	"	"
R262	QRD141J-104S	"	"	"
R271	QRD141J-122S	1.2 kΩ	"	"
R272	QRD141J-122S	"	"	"
R273	QRD141J-122S	"	"	"
R301	QVF0A2B-014	10 kΩ		Variable

Resistors

Item No.	Part Number	Rating		Description
R303	QRD141J-222S	2.2 kΩ	1/4 W	Carbon
R304	QRD141J-222S	"	"	"
R305	QRD141J-224S	220 kΩ	"	"
R306	QRD141J-224S	"	"	"
R307	QRD141J-224S	"	"	"
R308	QRD141J-224S	"	"	"
R309	QRD141J-104S	100 kΩ	"	"
R310	QRD141J-104S	"	"	"
R311	QRD141J-473S	47 kΩ	"	"
R401	QRD141J-104S	100 kΩ	"	"
R402	QRD141J-104S	"	"	"
R403	QRD141J-222S	2.2 kΩ	"	"
R404	QRD141J-222S	"	"	"
R405	QRD141J-104S	100 kΩ	"	"
R406	QRD141J-104S	"	"	"
R407	QRD141J-393S	39 kΩ	"	"
R408	QRD141J-393S	"	"	"
R409	QRD141J-474S	470 kΩ	"	"
R410	QRD141J-474S	"	"	"
R411	QRD141J-182S	1.8 kΩ	"	"
R412	QRD141J-182S	"	"	"
R413	QRD141J-821S	820 Ω	"	"
R414	QRD141J-821S	"	"	"
R415	QRD141J-104S	100 kΩ	"	"
R416	QRD141J-104S	"	"	"
R501	QRD141J-472S	4.7 kΩ	"	"
R502	QRD141J-472S	"	"	"
R503	QVF0A2W-6F5	250 kΩ		Variable
R505	QRD141J-223S	22 kΩ	"	Carbon
R506	QRD141J-223S	"	"	"
R507	QVZ1716-001			Variable
R509	QRD141J-752S	7.5 kΩ	1/4 W	Carbon
R511	QRD141J-151S	150 Ω	"	"
R512	QRD141J-151S	"	"	"
R513	QRD141J-472S	4.7 kΩ	"	"
R514	QRD141J-472S	"	"	"
R515	QRD141J-472S	"	"	"
R516	QRD141J-472S	"	"	"
R517	QRD141J-5R6S	5.6 Ω	"	"
R518	QRD141J-5R6S	"	"	"
R519	QRD129J-180	18 Ω	1/2 W	UNF. Carbon ⚠
R520	QRD141J-101S	100 Ω	1/4 W	Carbon
R521	QRD141J-224S	220 kΩ	"	"
R522	QRD141J-224S	"	"	"
R601	QRD141J-562S	5.6 kΩ	"	"
R602	QRD141J-562S	"	"	"
R603	QRD141J-123S	12 kΩ	"	"
R604	QRD141J-123S	"	"	"
R605	QRD141J-823S	82 kΩ	"	"
R606	QRD141J-823S	"	"	"
R607	QRD141J-182S	1.8 kΩ	1/4 W	Carbon
R608	QRD141J-182S	"	"	"
R609	QRD141J-182S	"	"	"
R610	QRD141J-182S	"	"	"
R611	QRD141J-472S	4.7 kΩ	"	"
R612	QRD141J-472S	"	"	"
R613	QRD141J-561S	560 Ω	"	"
R614	QRD141J-561S	"	"	"
R615	QVD4A2C-115	100 kΩ		Variable
R616	QVD4A2C-115	"		"
R701	QRD141J-102S	1 kΩ	1/4 W	Carbon
R702	QRD141J-102S	"	"	"
R703	QRD141J-104S	100 kΩ	"	"
R704	QRD141J-104S	"	"	"
R705	QRD141J-182S	1.8 kΩ	"	"
R706	QRD141J-182S	"	"	"
R707	QRD141J-432S	4.3 kΩ	"	"
R708	QRD141J-432S	"	"	"
R709	QRD141J-332S	3.3 kΩ	"	"
R710	QRD141J-332S	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R711	QRD149J-100S	10 Ω	1/4 W	UNF. Carbon ⚠
R712	QRD149J-100S	"	"	"
R713	QRD141J-102S	1 kΩ	"	Carbon
R714	QRD141J-102S	"	"	"
R715	QVP4A0B-222	2.2 kΩ		Variable
R716	QVP4A0B-222	"		"
R717	QRZ0052-820	82 Ω		Fuseble ⚠
R721	QRD141J-102S	1 kΩ	1/4 W	Carbon
R722	QRD141J-102S	"	"	"
R723	QRD149J-332S	3.3 kΩ	"	UNF. Carbon ⚠
R724	QRD149J-332S	"	"	"
R725	QRD141J-242S	2.4 kΩ	"	Carbon
R726	QRD141J-242S	"	"	"
R731	QRD149J-100S	10 Ω	"	UNF. Carbon ⚠
R732	QRD149J-100S	10 Ω	"	"
R733	QRD149J-3R3S	3.3 Ω	"	"
R734	QRD149J-3R3S	"	"	"
R735	QRD149J-221S	220 Ω	"	"
R736	QRD149J-221S	"	"	UNF. Carbon ⚠
R737	ERF032K-R47	0.47 Ω	3 W	Cement ⚠
R738	ERF032K-R47	"	"	"
R739	QRD141J-683S	68 kΩ	1/4 W	Carbon
R740	QRD141J-683S	"	"	"
R741	QRD141J-751S	750 Ω	"	"
R742	QRD141J-751S	"	"	"
R743	QRD129J-100	10 Ω	1/2 W	UNF. Carbon ⚠
R744	QRD129J-100	"	"	"
R745	QRD149J-100S	10 Ω	1/4 W	"
R746	QRD149J-100S	"	"	"
R747	QRD017J-152S	1.5 kΩ	1 W	UNF. Oxide Metal Film ⚠
R753	QRD149J-470S	47 Ω	1/4 W	Carbon ⚠
R754	QRD149J-470S	"	"	"
R771	QRD129J-221	220 Ω	1/2 W	UNF. Carbon ⚠
R772	QRD129J-221	"	"	"
R801	QRZ0052-221	"	1/4 W	Fusible ⚠
R802	QRZ0052-221	"	"	"
R803	QRD141J-332S	3.3 kΩ	1/4 W	Carbon
R804	QRD141J-332S	"	"	"
R805	QRD149J-101S	100 Ω	"	UNF. Carbon ⚠
R806	QRD149J-101S	"	"	"
R807	QRZ0052-101	"	"	Fusible ⚠
R808	QRD141J-822S	8.2 kΩ	"	Carbon
R809	QRG017J-470S	47 Ω	1 W	Oxide Metal Film ⚠
R809	QRG016J-470S	47 Ω	"	Oxide Metal Film ⚠ (Europe and U.K.)
R810	QRD148J-394S	390 kΩ	1/4 W	Carbon
R811	QRD148J-114S	110 kΩ	"	Carbon
R901	QRD149J-100S	10 Ω	"	UNF. Carbon ⚠
R902	QRD141J-103S	10 kΩ	"	Carbon
R903	QRD141J-104S	100 kΩ	"	"
R904	QRD141J-124S	120 kΩ	"	"
R905	QRD148J-304S	300 kΩ	"	"
R906	QRD141J-332S	3.3 kΩ	"	"
R907	QRD141J-103S	10 kΩ	"	"
R908	QRD141J-471S	470 Ω	"	"
R909	QRD141J-103S	10 kΩ	"	"
R910	QRD149J-100S	10 Ω	"	UNF. Carbon ⚠
R911	QRD141J-333S	33 kΩ	"	Carbon
R912	QRD141J-333S	"	"	"
R913	QRD141J-273S	27 kΩ	"	"
R951	QRD141J-102S	1 kΩ	"	"
R952	QRD141J-102S	"	"	"
R953	QRD141J-473S	47 kΩ	"	"
R954	QRD141J-473S	"	"	"

Others

Item No.	Part Number	Rating	Description
	ESP0001-007		Push Switch
	QST2101-E02		"
	QST2102-E01		"
	EMN00TV-401A		4P Pin Jack
	EMN00TV-601A		6P Pin Jack
	QMC0437-002		AC Socket (U.S.A. and Canada)
	QMS6312-011		Head Phone Jack
	E48965-002		Fuse Clip
	EMB10YV-401A		Speaker Terminal
	E03675-004		Fuse Clip (U.S.A. and Canada)
	E10671-101		Circuit Board
	E10671-101BS		Circuit Board (for U.K.)
	E301939-001		LED Holder
	SBSB3008N		Tapping Screw
	SBSB3008Z		"
	SBSE3012Z		Screw
	SPSP3008N		"
	SBSB3008M		"
	E301940-001		Heat Sink
	E61537-006		"
	E65396-001		Earth Plate
J301	QMS6315-001		Mic. Jack
R755	SDT250		Thermister
R756	SDT250		"

⚠ : Safety Parts

(for W. Germany only)

Resistors

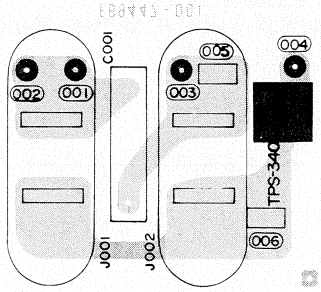
Item No.	Part Number	Rating		Description
R743	QRD129J-3R3	3.3 Ω	1/2 W	UNF. Carbon ⚠
R744	QRD129J-3R3	"	"	"
R753	QRD149J-100S	10 Ω	1/4 W	"
R754	QRD149J-100S	"	"	"

Capacitors

Item No.	Part Number	Rating		Desctiption
C271	QCS31HJ-101	100 pF	50 V	Ceramic
C272	QCS31HJ-101	"	"	"
C403	QCS31HJ-151	150 pF	"	"
C404	QCS31HJ-471	"	"	"
C417	QCS31HJ-471	470 pF	"	"
C418	QCS31HJ-471	"	"	"
C707	QCS31HJ-180	18 pF	"	"
C708	QCS31HJ-180	"	"	"
C713	QCS31HJ-100	10 pF	"	"
C714	QCS31HJ-100	"	"	"
C717	QFM31HK-563	0.056 μF	"	Mylar
C718	QFM31HK-563	"	"	"
C723	QFM31HK-222	2200 pF	"	"
C724	QFM31HK-222	"	"	"
C725	QCS31HJ-271	270 pF	"	Ceramic
C726	QCS31HJ-271	"	"	"

9-(2) TPS-340 AC Outlet P.C. Board Ass'y

(U.S. Military Market and Other Countries)



Part Number	Description
E69447-001	Circuit Board
QMC0231-004	AC Outlet ⚠
QFZ9010-472	Metalized Mylar Capacitor ⚠
E43727-001	Tab
E65508-002	Tab

⚠ : Safety Parts

Fig. 11

10. Packing Materials and Part Numbers

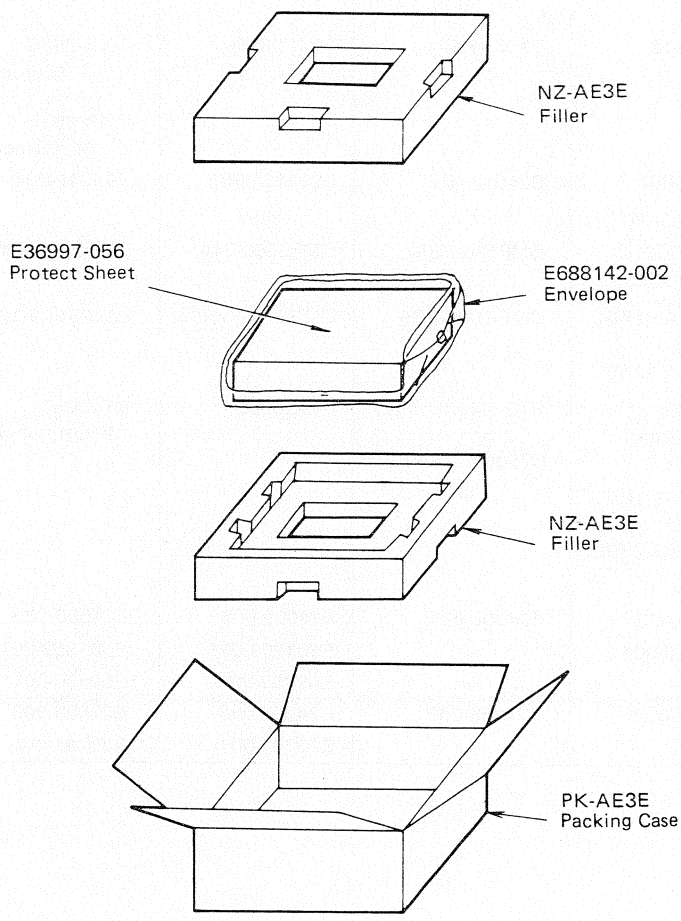


Fig. 12

11. Accessories List

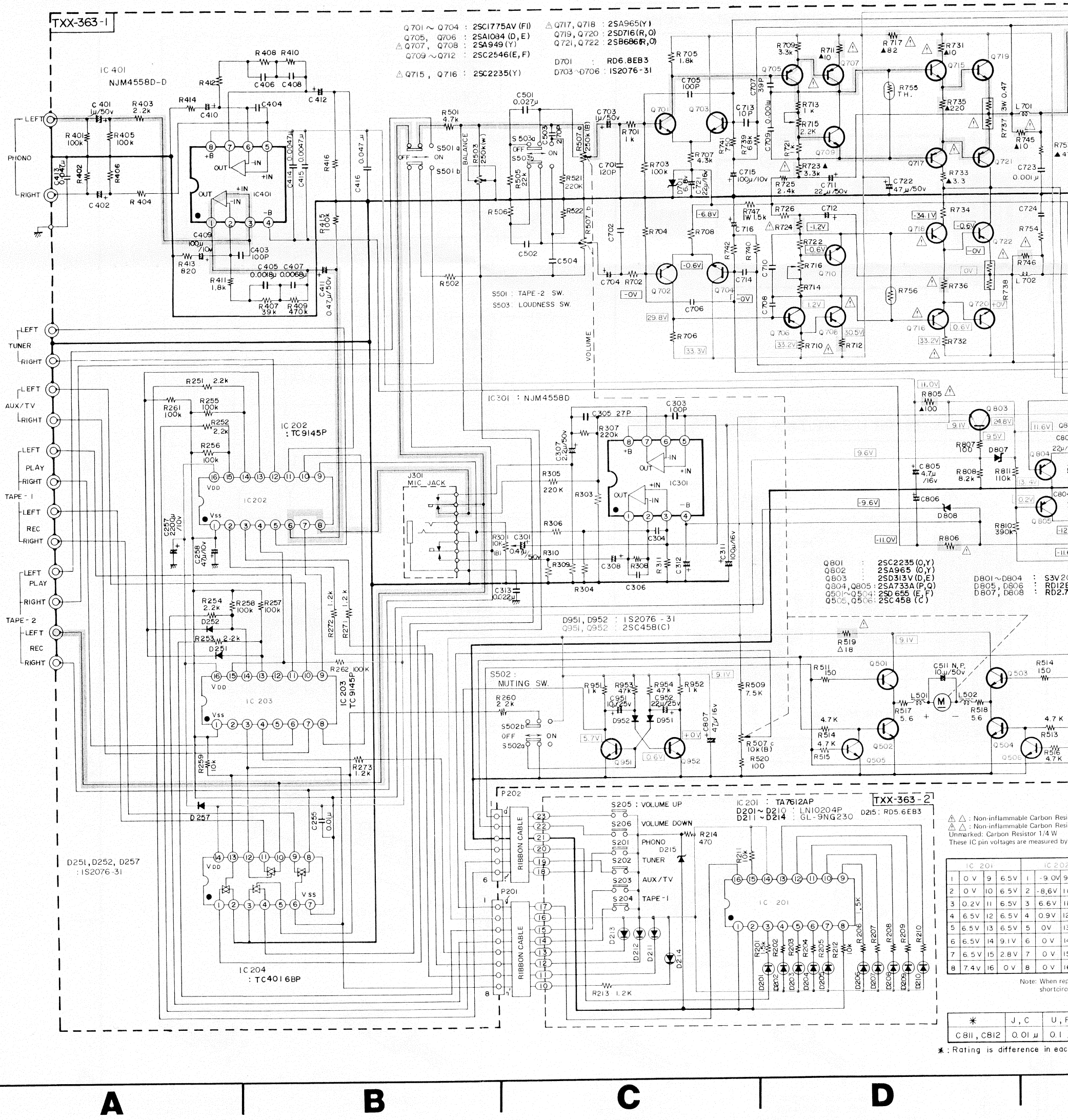
Item No.	Part Number	Description	Q'ty
1	E30580-1010A	Instruction Book (for Spain, E30580-1011A)	1
2	See below	Warranty Card	1
3	E41202-2	Envelope for Instruction Book & Warranty Card	1
4	BT20046	Service Information Card (for U.S.A. and U.S. Military Market)	1
5	See below	Fuses (Within)	1
6	E64204-073	Envelope for Fuses (Within)	1
7	BT20044B	JVC Safety Instruction Sheet (for U.S.A. only)	1
8	See below	Siemens Plug	1

12. Parts List with Specified Numbers for Designated Areas

Item No.	Description	U.S. Military Market & Other Countries	U.S.A. & Canada	Australia	Europe & W. Germany	U.K.
1	Power Transformer ⚠	ETP4070-01FA	ETP4070-01JA	ETP4070-01EA	ETP4070-01EA	ETP4070-01EABS
2	Power Switch ⚠	QSP1110-305	QSP1110-308	QSP1110-305	QSP1110-305	QSP1110-305BS
3	AC Outlet P.C. Board Ass'y ⚠	TPS-340A	–	–	–	–
4	Main Amp. & Other Function Split P.C. Board Ass'y	TXX-363C	TXX-363B	TXX-363D	TXX-363D (Europe) TXX-363E (W. Germany)	TXX-363FBS
5	Rear Panel	E24012-003	E24012-002	E24012-005	E24012-004	E24012-005
6	Voltage Selector ⚠	QSR0085-001	–	–	–	–
7	Power Cord ⚠	QMP7600-250	QMP1200-200	QMP2560-244	QMP3900-200	QMP9017-008BS
8	Fuse Socket ⚠	QMG0301-003	–	–	–	–
9	Fuse (Primary F001) ⚠	QMF51A2-1R0L or QMF51A2-2R0L	QMF61U1-2R0	QMF51A2-1R0L	QMF51A2-1R0L	QMF51A2-1R0LBS
10	Warranty Card	BT20048 (U.S. Military Market)	BT20048 (U.S.A.) or BT20025D(Canada)	BT20029C	BT20057 (W. Germany)	BT20013C
11	Fuse (Within) ⚠	QMF51A2-1R0L or QMF51A2-2R0L	–	–	–	–
12	Siemens Plug ⚠	E04056	–	–	–	–
13	Chassis Base	E24005-003	E24005-004	E24005-005	E24005-005	E24005-005
14	Switch Cover	E301869-001	–	E301869-001	E301869-001	E301869-001
15	Shield Cover	–	–	E69453-001	E69453-001	E69453-001
16	Top Cover	E24008-002	E24008-002	E24008-003	E24008-003	E24008-003
17	Grille	–	–	E23741-001	E23741-001	E23741-001

⚠: Safety parts

13. A-E3 Schematic Diagram



✱	J, C	U, F
C811, C812	0.01 μ	0.1

IC 201				IC 202			
1	0 V	9	6.5V	1	-9.0V	9	
2	0 V	10	6.5V	2	-8.6V	10	
3	0.2V	11	6.5V	3	6.6V	11	
4	6.5V	12	6.5V	4	0.9V	12	
5	6.5V	13	6.5V	5	0V	13	
6	6.5V	14	9.1V	6	0 V	14	
7	6.5V	15	2.8V	7	0 V	15	
8	7.4V	16	0 V	8	0 V	16	

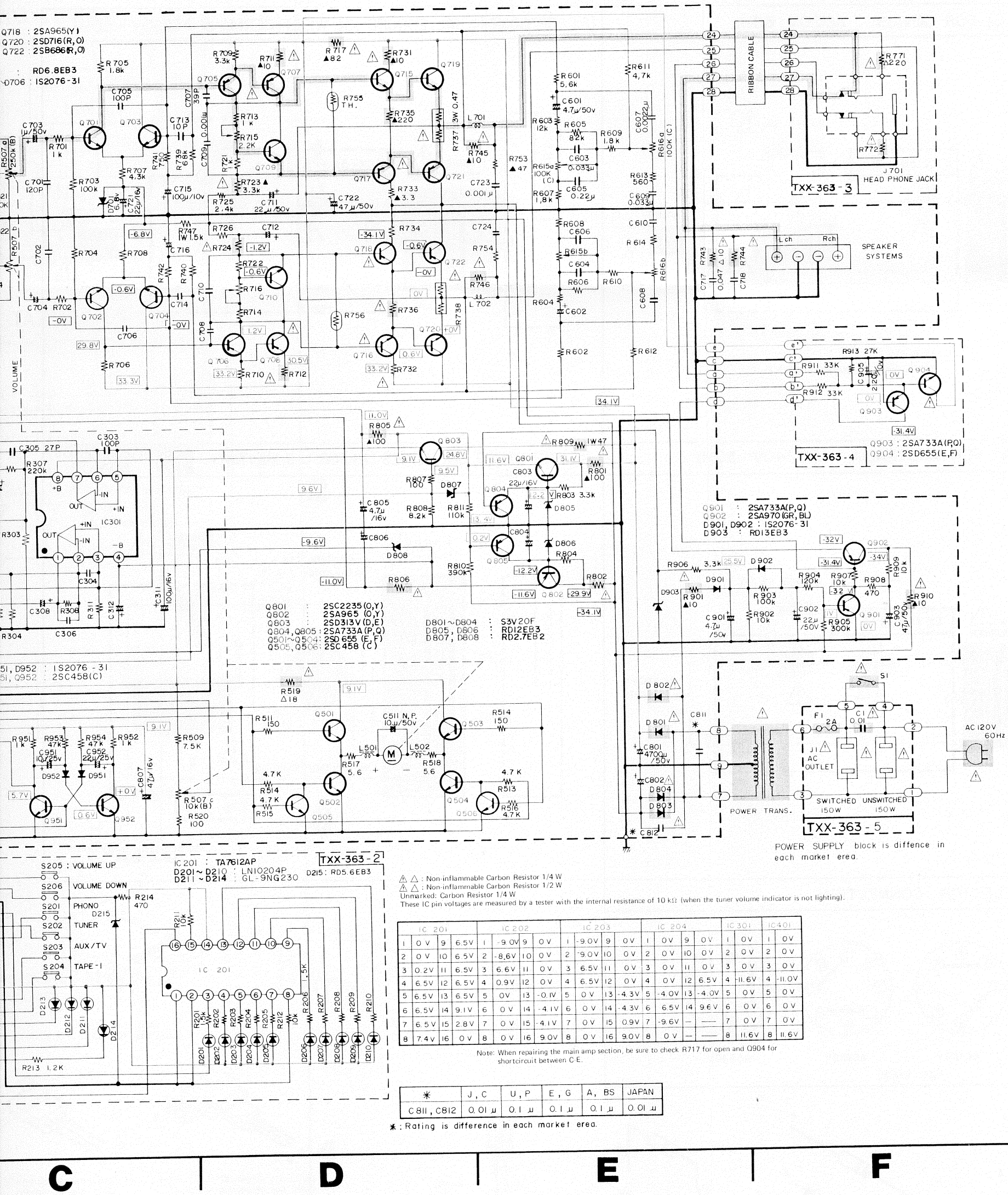
Printed Circuit Board Ass'y Locations

P.C. Board Ass'y	Description	Page
TXX-363	Main Amp. & Other Function Split P.C. Board Ass'y	8
TPS-340	AC Outlet P.C. Board Ass'y	12

Notes:

1. When replacing the parts in the darkened area and those marked with △, be sure to use the designated parts to ensure safety.
2. indicates signal path.
3. —— indicates positive B power supply.
4. —— indicates negative B power supply.
5. Parts in red indicate transistors or ICs.
6. This is the standard circuit diagram.

The design and contents are subject to change without notice.



△△ : Non-inflammable Carbon Resistor 1/4 W
△△ : Non-inflammable Carbon Resistor 1/2 W
Unmarked: Carbon Resistor 1/4 W
These IC pin voltages are measured by a tester with the internal resistance of 10 kΩ (when the tuner volume indicator is not lighting).

IC 201				IC 202				IC 203				IC 204				IC 301		IC 401	
1	0 V	9	6.5V	1	-9.0V	9	0 V	1	-9.0V	9	0 V	1	0 V	9	0 V	1	0 V	1	0 V
2	0 V	10	6.5V	2	-8.6V	10	0 V	2	-9.0V	10	0 V	2	0 V	10	0 V	2	0 V	2	0 V
3	0.2V	11	6.5V	3	6.6V	11	0 V	3	6.5V	11	0 V	3	0 V	11	0 V	3	0 V	3	0 V
4	6.5V	12	6.5V	4	0.9V	12	0 V	4	6.5V	12	0 V	4	0 V	12	6.5V	4	-11.6V	4	-11.0V
5	6.5V	13	6.5V	5	0V	13	-0.1V	5	0 V	13	-4.3V	5	-4.0V	13	-4.0V	5	0 V	5	0 V
6	6.5V	14	9.1V	6	0 V	14	-4.1V	6	0 V	14	-4.3V	6	6.5V	14	9.6V	6	0 V	6	0 V
7	6.5V	15	2.8V	7	0 V	15	-4.1V	7	0 V	15	0.9V	7	-9.6V	—	——	7	0 V	7	0 V
8	7.4V	16	0 V	8	0 V	16	9.0V	8	0 V	16	9.0V	8	0 V	—	——	8	11.6V	8	11.6V

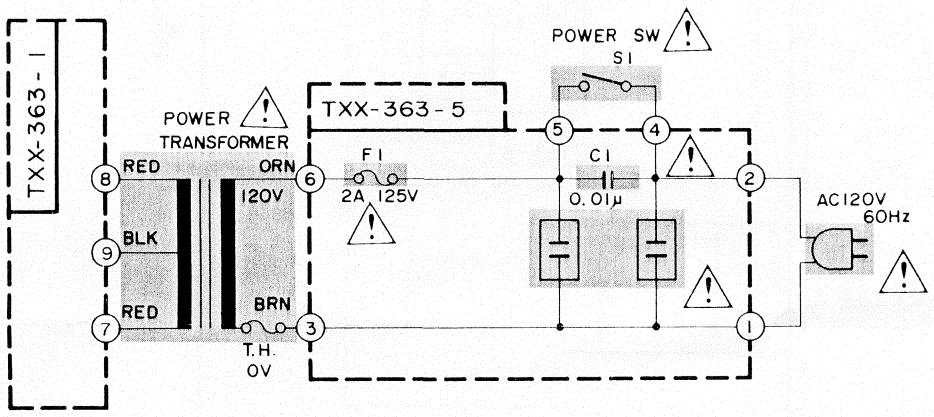
Note: When repairing the main amp section, be sure to check R717 for open and Q904 for shortcircuit between C-E.

✳	J, C	U, P	E, G	A, BS	JAPAN
C811, C812	0.01 μ	0.1 μ	0.1 μ	0.1 μ	0.01 μ

✳ : Rating is difference in each market erea.

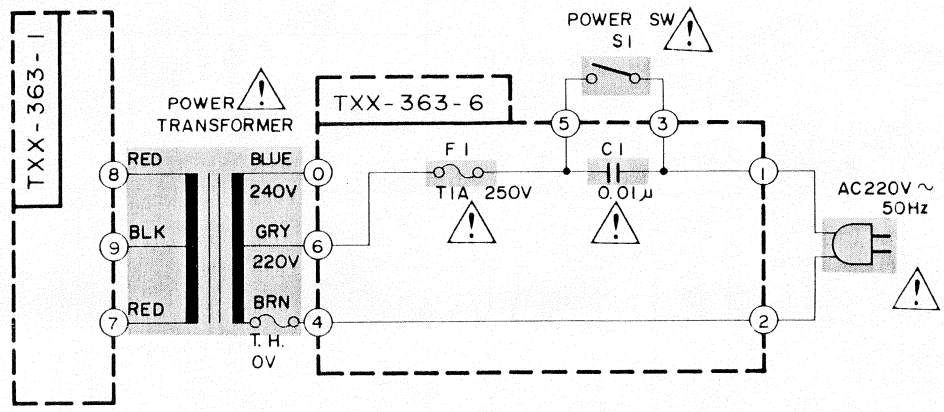
g the parts in the darkened area ▒ and with ⚠, be sure to use the designated parts y.
s signal path.
s positive B power supply.
s negative B power supply.
dicate transistors or ICs.
ndard circuit diagram.
ontents are subject to change without notice.

(J) FOR U.S.A. (C) FOR CANADA AC120V 60Hz

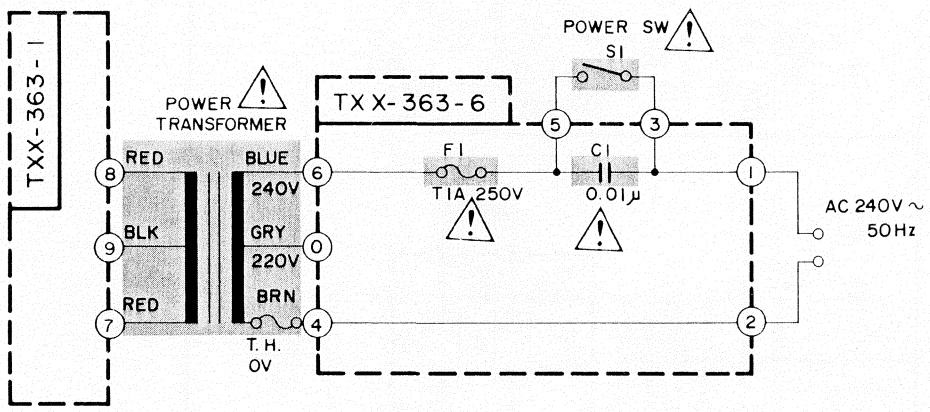


AC OUTLETS
SWITCHED × 1 , UNSWITCHED × 1

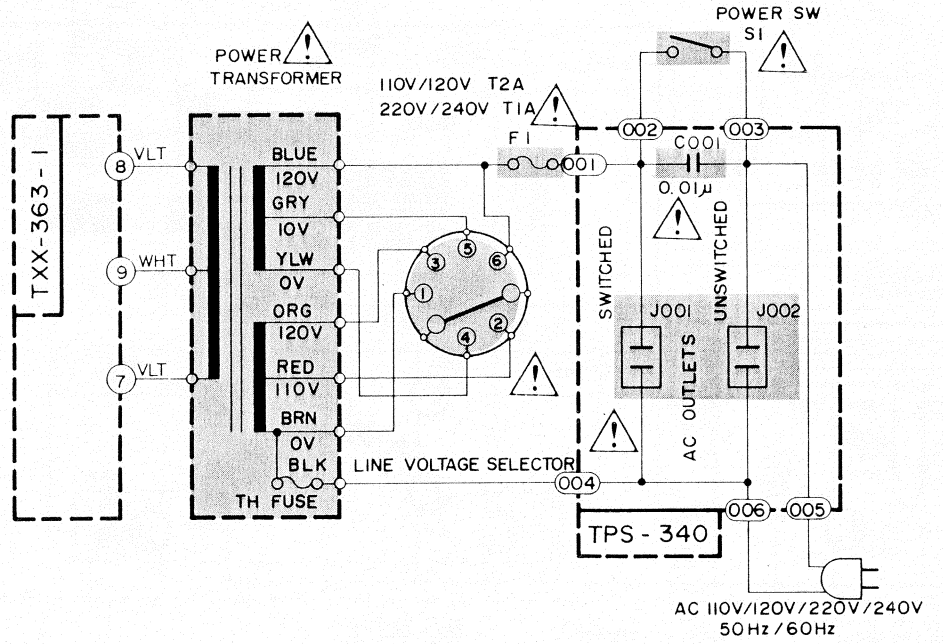
(E) FOR CONTINETAL EUROPE (G) WEST GERMANY AC220V~50Hz



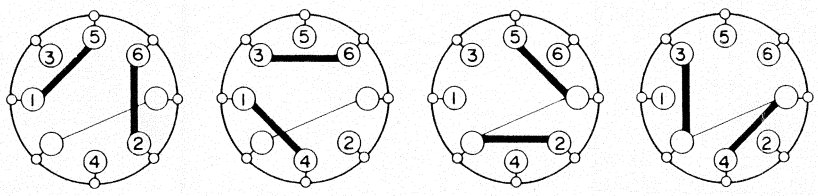
(BS) FOR U.K. (A) FOR AUSTRALIA AC240V~50Hz

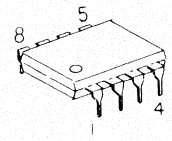


(U) FOR OTHER COUNTRIES (P) FOR U.S. MILITARY AC110V/120V/220V 240V 50/60Hz

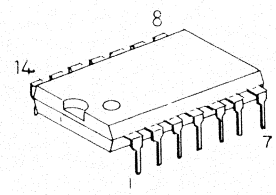


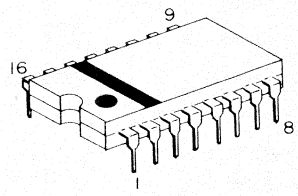
VOLTAGE SELECTOR CONNECTION



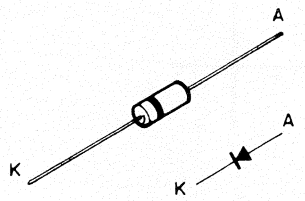


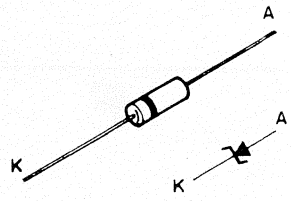
IC301 : NJM4558D
IC401 : NJM4558D-D

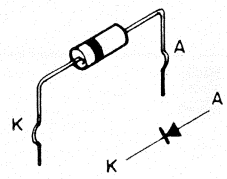




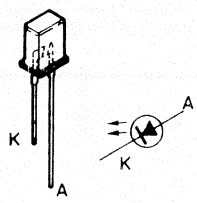
IC201 : TA7612AP
IC202, 203 : TC9145P



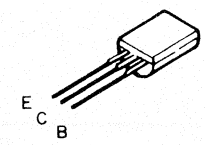




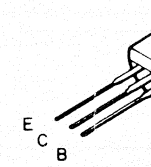
D801~804 : S3V20F



D211~214 : GL-9NG230

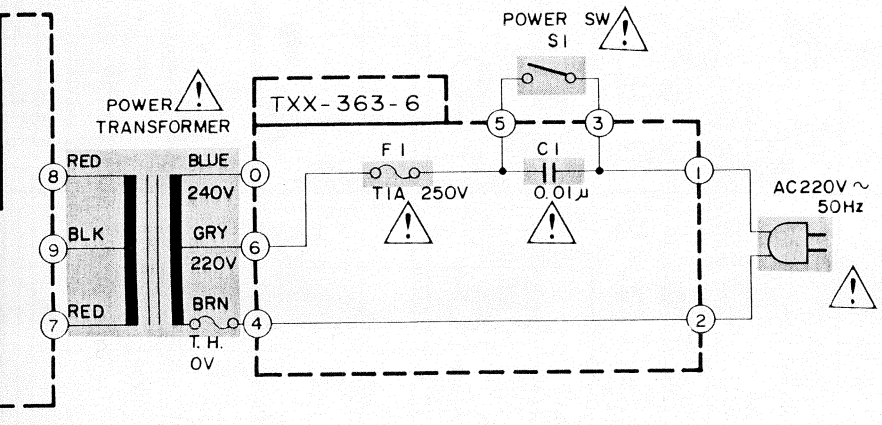


Q501~504 : 2SD655(E, F)
Q505, 506 : 2SC458(C)
Q701~704 : 2SC1775AV(F1)
Q705, 706 : 2SA1084(D, E)
Q709~712 : 2SC2546(E, F)
Q713, 714 : 2SA1084(D, E)
Q804, 805 : 2SA733A(P, Q)
Q901 : 2SA733A(P, Q)
Q902 : 2SA970(GR, BL)
Q903 : 2SA733A(P, Q)
Q904 : 2SD655(E, F)
Q951, 952 : 2SC458(C)

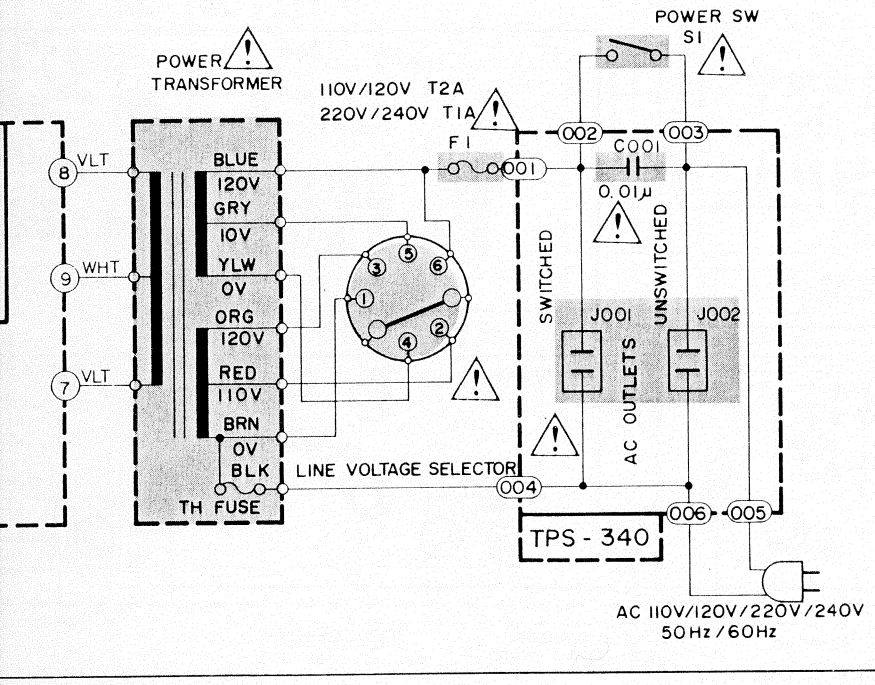


Q707, 708 : 2SA94
Q715, 716 : 2SC22
Q717, 718 : 2SA96
Q801 : 2SC22
Q802 : 2SA96

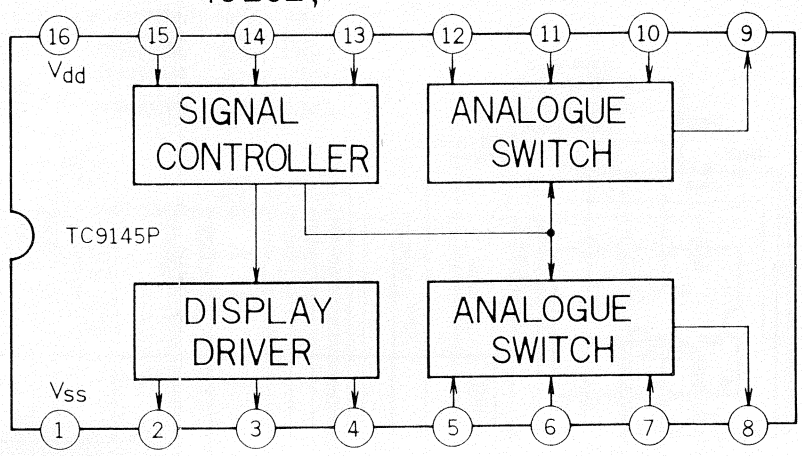
CONTINETAL EUROPE (G) WEST GERMANY AC220V~50Hz



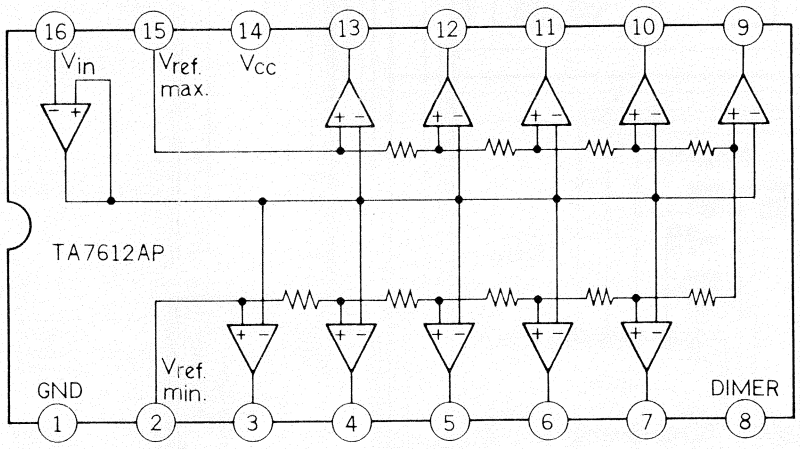
R OTHER COUNTRIES (P) FOR U.S. MILITARY AC110V/120V/220V 240V 50/60Hz



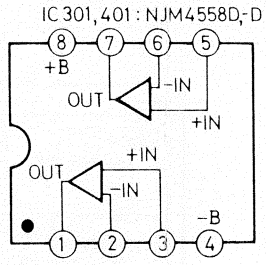
IC202, IC203 : TC9145P



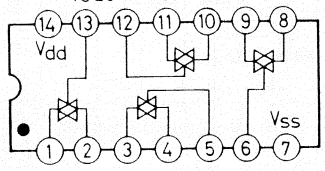
IC201 : TA7612AP

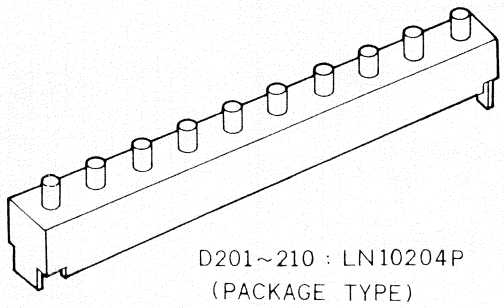


IC301, 401 : NJM4558D, -D



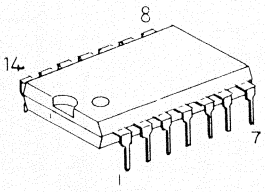
IC204 : TC4016BP

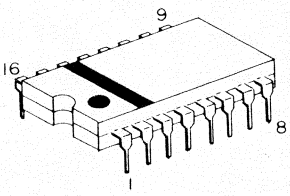




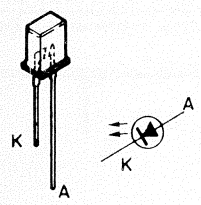
D201~210 : LN10204P
(PACKAGE TYPE)

M4558D
M4558D-D

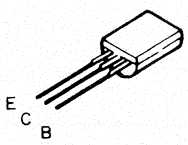




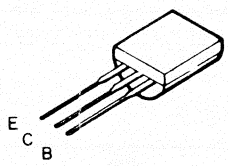
IC201 : TA7612AP
IC202, 203 : TC9145P



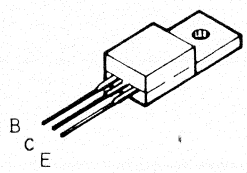
D211~214 : GL-9NG230



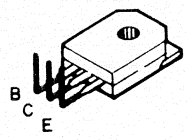
Q501~504 : 2SD655(E, F)
Q505, 506 : 2SC458(C)
Q701~704 : 2SC1775AV(F1)
Q705, 706 : 2SA1084(D, E)
Q709~712 : 2SC2546(E, F)
Q713, 714 : 2SA1084(D, E)
Q804, 805 : 2SA733A(P, Q)
Q901 : 2SA733A(P, Q)
Q902 : 2SA970(GR, BL)
Q903 : 2SA733A(P, Q)
Q904 : 2SD655(E, F)
Q951, 952 : 2SC458(C)



Q707, 708 : 2SA949(Y)
Q715, 716 : 2SC2235(Y)
Q717, 718 : 2SA965(Y)
Q801 : 2SC2235(O, Y)
Q802 : 2SA965(O, Y)



Q803 : 2SD313V(D, E)



Q719, 720 : 2SD716(R, O)
Q721, 722 : 2SB686(R, O)